

SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS <i>OFFEROR TO COMPLETE BLOCKS 12, 17, 23, 24, AND 30</i>				1. REQUISITION NUMBER W68MD9-5089-4101-0001		PAGE 1 OF 36	
2. CONTRACT NO. W912DW-05-P-0231		3. AWARD/EFFECTIVE DATE 01-Jun-2005		4. ORDER NUMBER		5. SOLICITATION NUMBER	
7. FOR SOLICITATION INFORMATION CALL:		a. NAME				b. TELEPHONE NUMBER (No Collect Calls)	
9. ISSUED BY USA ENGINEER DISTRICT, SEATTLE ATTN: CENWS-CT 4735 EAST MARGINAL WAY SOUTH SEATTLE WA 98134-2329 TEL: 206-764-3772 FAX: 206-764-6817		CODE W912DW		10. THIS ACQUISITION IS <input type="checkbox"/> UNRESTRICTED <input checked="" type="checkbox"/> SET ASIDE: 100 % FOR <input checked="" type="checkbox"/> SMALL BUSINESS <input type="checkbox"/> HUBZONE SMALL BUSINESS <input type="checkbox"/> 8(A) NAICS: 213115 SIZE STANDARD:\$6.0 MILLION		11. DELIVERY FOR FOB DESTINATION UNLESS BLOCK IS MARKED <input type="checkbox"/> SEE SCHEDULE	
						12. DISCOUNT TERMS Net 30	
15. DELIVER TO SUPPLY & FACILITIES MGMT BR. 4735 E. MARGINAL WAY S. SEATTLE WA 98134-2385		CODE G370F00		16. ADMINISTERED BY USA ENGINEER DISTRICT, SEATTLE VINCENT DANIELS PH:206-764-3572 FAX: 206-764-6817 VINCENT.E.DANIELS@US.ARMY.MIL SEATTLE WA		CODE W912DW	
17a. CONTRACTOR/OFFEROR PROSONIC CORPORATION MATTHEW R. WINFIELD 5700 SE JOHNSON CREEK BLVD PORTLAND OR 97206 TEL. (503)-288-5850		CODE 091L5 FACILITY CODE 091L5		18a. PAYMENT WILL BE MADE BY US ARMY CORPS OF ENGRS FINANCE CENTER CEFC-AO-P 901-874-8556 5722 INTEGRITY DRIVE MILLINGTON TN 38054-5005		CODE W66KQZ	
<input type="checkbox"/> 17b. CHECK IF REMITTANCE IS DIFFERENT AND PUT SUCH ADDRESS IN OFFER		18b. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 18a. UNLESS BLOCK BELOW IS CHECKED <input type="checkbox"/> SEE ADDENDUM					
19. ITEM NO.	20. SCHEDULE OF SUPPLIES/ SERVICES			21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT
	SEE SCHEDULE						
25. ACCOUNTING AND APPROPRIATION DATA See Schedule						26. TOTAL AWARD AMOUNT (For Govt. Use Only) \$218,940.00	
<input type="checkbox"/> 27a. SOLICITATION INCORPORATES BY REFERENCE FAR 52.212-1. 52.212-4. FAR 52.212-3. 52.212-5 ARE ATTACHED. ADDENDA <input type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED <input type="checkbox"/> 27b. CONTRACT/PURCHASE ORDER INCORPORATES BY REFERENCE FAR 52.212-4. FAR 52.212-5 IS ATTACHED. ADDENDA <input type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED							
28. CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN COPIES <input type="checkbox"/> TO ISSUING OFFICE. CONTRACTOR AGREES TO FURNISH AND DELIVER ALL ITEMS SET FORTH OR OTHERWISE IDENTIFIED ABOVE AND ON ANY ADDITIONAL SHEETS SUBJECT TO THE TERMS AND CONDITIONS SPECIFIED HEREIN.				29. AWARD OF CONTRACT: REFERENCE <u>Prosonic Corporation</u> <input checked="" type="checkbox"/> OFFER DATED <u>24-May-2005</u> . YOUR OFFER ON SOLICITATION (BLOCK 5), INCLUDING ANY ADDITIONS OR CHANGES WHICH ARE SET FORTH HEREIN, IS ACCEPTED AS TO ITEMS SEE SCHEDULE			
30a. SIGNATURE OF OFFEROR/CONTRACTOR				31a. UNITED STATES OF AMERICA (SIGNATURE OF CONTRACTING OFFICER)		31c. DATE SIGNED	
				<i>Elaine M Ebert</i>		03-Jun-2005	
30b. NAME AND TITLE OF SIGNER (TYPE OR PRINT)		30c. DATE SIGNED		31b. NAME OF CONTRACTING OFFICER (TYPE OR PRINT) ELAINE M EBERT / CONTRACTING OFFICER TEL: (206) 764-3638 EMAIL: elaine.m.ebert@usace.army.mil			

**SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS
(CONTINUED)**

PAGE 2 OF 36

19. ITEM NO.	20. SCHEDULE OF SUPPLIES/ SERVICES	21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT
	SEE SCHEDULE				

32a. QUANTITY IN COLUMN 21 HAS BEEN

☐ RECEIVED ☐ INSPECTED ☐ ACCEPTED, AND CONFORMS TO THE CONTRACT, EXCEPT AS NOTED: _____

32b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE		32c. DATE	32d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE
32e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE		32f. TELEPHONE NUMBER OF AUTHORIZED GOVERNMENT REPRESENTATIVE	
		32g. E-MAIL OF AUTHORIZED GOVERNMENT REPRESENTATIVE	

33. SHIP NUMBER	34. VOUCHER NUMBER	35. AMOUNT VERIFIED CORRECT FOR	36. PAYMENT <input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL	37. CHECK NUMBER
<input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL				

38. S/R ACCOUNT NUMBER	39. S/R VOUCHER NUMBER	40. PAID BY

41a. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT		42a. RECEIVED BY <i>(Print)</i>	
41b. SIGNATURE AND TITLE OF CERTIFYING OFFICER		41c. DATE	
		42b. RECEIVED AT <i>(Location)</i>	
		42c. DATE REC'D (YY/MM/DD)	42d. TOTAL CONTAINERS

Section SF 1449 - CONTINUATION SHEET

CONTINUATION

Web Invoicing System (WInS)

WInS is an optional online invoicing system providing Department of Defense vendors an electronic means of submitting invoices for payment. Vendor registration for WinS is accomplished through the following DFAS website: <https://ecweb.dfas.mil>

At the website click on NEW Account to register and select "USACE" as the payment system name. The payment office code and location is "TO-UFC Millington". To establish an account in WInS, vendors must be registered with the Central Contractor Registration (CCR).

Period of performance is in strict accordance with the revised statement of work dated 26 May 2005.

OPTIONAL ITEMS IF AWARDED SHALL BE EXERCISED AT LEAST 60 DAYS BEFORE EXPIRATION OF THE BASE AWARD.

Verbal confirmation of award was given on 25 May 2005 to Matthew R. Winfield of Prosonic Corporation by Vincent Daniels.

Contracting Officer Representative (COR) for this purchase order will be Lawrence V. Mann at (206)-764-3711.

Notice to Proceed is hereby effective as of the day the Contracting Officer signs this purchase order.

CF:

Matthew R. Winfield, (mwinfield@prosoniccorp.com)

Ph: (503)-288-5850 Fax: (503)-288-5579

George, Steven M.

Smith, Richard E.

Westhoff, Shawna M.

Mann, Lawrence V.

File

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001		1	Lump Sum	\$218,940.00	\$218,940.00

Drilling East Gate Disposal Yard (FTL)

FFP

Provide all plant, labor, materials, transportation, supplies, and accessories required to accomplish the investigations, monitoring well completions, and all other operations incidental to the work at the East Gate Disposal Yard (EGDY) in strict accordance with the revised statement of work dated 26 May 2005, specifications, and applicable schedule.

0001AA Mobilization/Demobilization of Air Rotary Drill Rig

QTY	UNIT	U. PRICE	AMOUNT
1	JOB	\$7,500.00	\$7,500.00

0001AB Drill and Install 32 Shallow 2" PVC Monitoring Wells, each not to exceed 50 feet depth, with 40 ft screens.

QTY	UNIT	U. PRICE	AMOUNT
1600	LF	\$46.00	\$73,600.00

0001AC Drill and Install 10 each - 2" PVC Monitoring Wells, not to exceed 80 feet depth, with 30 ft screens.

QTY	UNIT	U. PRICE	AMOUNT
800	LF	\$46.00	\$36,800.00

0001AD Drill and Install 7 Shallow 6" PVC Monitoring Wells, each not to exceed 60 feet depth, with 50ft screens

QTY	UNIT	U. PRICE	AMOUNT
420	LF	\$115.00	\$48,300.00

0001AE Monitoring Well Development

QTY	UNIT	U. PRICE	AMOUNT
392	HR	\$95.00	\$37,240.00

0001AF Standby Time, Equipment only (Air Rotary)

QTY	UNIT	U. PRICE	AMOUNT
28	HR	\$250.00	\$7,000.00

0001AG Mobilization/Demobilization of 20,000 gallon Baker Tank.

QTY	UNIT	U. PRICE	AMOUNT
1	JOB	\$500.00	\$500.00

0001AH Rental of 20,000 gallon Baker Tank.

QTY	UNIT	U. PRICE	AMOUNT
3	MO	\$1,250.00	\$3,750.00

0002 OPTIONAL ITEMS

DRILLING EAST GATE DISPOSAL YARD (FT. LEIWS):

Provide all plant, labor, materials, transportation, supplies, and accessories required to accomplish the investigations, monitoring well completions, and all other operations incidental to the work at the East Gate Disposal Yard (EGDY) in strict accordance with the revised Statement of Work dated 26 May 2005, specifications, and applicable schedule.

0002AA Mobilization/Demobilization of 20,000 gallon Baker Tank.

QTY	UNIT	U. PRICE	AMOUNT
1	JOB	\$500.00	\$500.00

0002AB Rental of 20,000 gallon Baker Tank.

QTY	UNIT	U. PRICE	AMOUNT
3	MO	\$1,250.00	\$3,750.00

PURCHASE REQUEST NUMBER: W68MD9-5089-4101-0001

NET AMT	\$218,940.00
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ACRN AA Funded Amount	\$218,940.00
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FOB: Destination

ITEM(S) 0001 - STATEMENT OF WORK**AIR ROTARY OR SONIC DRILLING AND INSTALLATION OF MONITORING WELLS****Modification 0001****Revised: 26 May 2005****1 SCOPE**

It is the intent and purpose of the work specified herein to drill and install monitoring wells and sample sub-surface materials as part of a performance assessment of thermal remediation at the East Gate Disposal Yard (EGDY). All monitoring wells shall be drilled by Air Rotary or Sonic drilling method and constructed to yield representative ground water samples of the screened interval for chemical analysis and to allow for the accurate measurement of ground water depths relative to the top of the well riser. Maximum drilling depth for the monitoring wells is 80 feet below ground surface. The work consists of furnishing all plant, labor, materials, transportation, supplies, and accessories required to accomplish the investigations, monitoring well completions, and all other operations incidental to the work in strict accordance with these specifications and applicable schedule. The Contractor shall provide personnel consisting of at least one experienced operator and two helpers.

The order of installation of monitoring wells will be determined by the contracting officer's authorized representative (COR). The Government's intent is to be able to log subsurface materials in conjunction with drilling monitoring wells and have wells developed immediately after installation so that they can be sampled. At some locations, the drilling will be halted at one or more depths before drilling is complete to allow the government to collect groundwater samples from the bottom of the open boring. The Government will use groundwater sampling data to determine the number and location of additional wells. The Contractor shall, therefore, have a development rig available to develop wells within 48 hours of well installation while the drill rig proceeds to drill and install the next well at a location directed by the COR. Screen lengths and actual depths of wells may vary depending on sub-surface conditions encountered. The COR shall direct the Contractor on how to complete each individual well.

Table 1. Drilling and Well Installation Activities.

Activity	Quantity	Maximum Depth (ft)	Drilling Method	Tentative Start Date ¹	Location	Remarks
Drill/Install Monitoring wells (2")	32	50	Air Rotary <u>Air Rotary or Sonic</u>	June 2005	NAPL Area 3	Flux wall
Drill/Install Monitoring wells (2")	<u>407</u>	80	<u>Air Rotary or Sonic</u>	June 2005	NAPL Area 3	Flux wall
Drill/Install Monitoring wells (6")	7	60	Air Rotary <u>Air Rotary or Sonic</u>	June 2005	Pump & Treat Area	Wells integrated for pump test.

¹Activity start dates may change depending on progress of other work on site.

All monitoring wells are located on the Fort Lewis military installation at the East Gate Disposal Yard (Logistics Center). Fort Lewis lies just south of Tacoma, Washington. See Figure 1 for Fort Lewis vicinity map and Figure 2 for East Gate Disposal Yard site location map. Monitoring well locations and their respective anticipated subsurface materials are in the Vashon Aquifer (Upper Aquifer). Work will consist of

drilling vertical soil core borings in silty sandy gravel overburden up to 80 feet depth in the Upper Aquifer and in groundwater contaminated with primarily trichloroethylene (TCE) and fuel oil hydrocarbons. TCE concentrations will range from non-detect to less than 100 mg/l. Upper Aquifer subsurface materials include silty sandy gravels with occasional cobbles to glacial till, and a glaciolacustrine silt/fine sand. The glacial till and lacustrine silt/sand are suspected to act together as an intermediate aquitard at depths 35 to 40 feet below ground surface. It is possible that the TCE contaminant may have penetrated below the intermediate aquitard. Variations from the conditions described here are to be expected. Depth to groundwater is anticipated to be approximately 10 feet below ground surface. The terrain is relatively flat and free of trees and large shrubs.

Work hours shall be Monday through Friday between 0700 and 1700. Weekend work will not be permitted without the contracting Officer's approval.

2 MONITORING WELLS

Drilling for monitoring well construction shall be by Air Rotary **or Sonic** methods using a drill rig suitable for the terrain. The work consists of drilling and installing approximately forty-nine (49) wells ~~by Air Rotary Drill rig~~ beginning ~~in June~~ **31 May** 2005.

- Thirty-Two (32) flux monitoring wells, 2" **PVCstainless steel**, not to exceed 50 feet depth, with 40 feet **stainless steel** screens (Figure 4).
- Ten (10) flux monitoring wells, 2" **PVCstainless steel**, not to exceed 80 feet depth, with 35 feet **stainless steel** screens (Figure 5).
- Seven (7) monitoring wells, 6" PVC, not to exceed 60 feet depth, with 50 feet screens (See Figure 3 for details).

The well installation method shall prevent the collapse of formation material against the well screen and riser casing. The inside diameter of any temporary steel casing used shall be sufficient to allow accurate placement of the well screen, riser pipe, centralizers, supplementary filter pack, bentonite pellet or chip seal and annular grout seal. Wells that do not exceed 50 ft depth will be screened above the water table. Direction for completing each monitoring well will be made by the designated Government Representative. The difference between the final depth of the soil boring and the bottom of the well screen may be significant and may require the placement of cement-bentonite grout below the well screen using a tremie pipe. A minimum of 24 hours will be required to allow the grout to set before completing the well.

2.1 ~~PVC~~ Well Casing - Riser Pipe

2.1.1 Stainless Steel Well Casing (Flux Wells)

Stainless steel well casing (riser pipe) shall be new 2 -inch I.D. Schedule 40, TP 304 stainless steel pipe. Casings shall meet the standards established in ASTM A 312. Only casing of standard manufacture will be accepted for use in the wells and the brand name shall be plainly marked on each length by the manufacturer. Casing shall be threaded and coupled to well screen assembly. A cap shall be fitted to the top of the riser, with a port which can accommodate up to 3/4 inch tubing which can be placed down the well to allow groundwater sampling without touching the steel. A stainless steel centralizer shall be placed at the bottom and top of the screen, beyond the open portion of the screen to insure the well is centered in the borehole.

2.1.2 Poly (vinyl chloride)(PVC) Well Casing (6" diameter monitoring wells)

PVC well casing (riser pipe) shall be new schedule 40, white PVC, Type 1, Grade 1 material as described in ASTM F 480 and ASTM D 1784, Class 12454b. Pipe shall also meet the requirements of NSF 14. Required fittings shall be ASTM F 480 flush thread male by female fittings including O-rings. PVC end caps designed to fit snugly on the top of the riser shall be provided. Riser pipe shall be free of foreign matter

(adhesive tape, labels, soil, grease, etc.) and cleaned by a hot water pressure washer. Washing may be omitted if riser pipes have been pre-washed and packaged by the manufacturer and have the packaging intact up to the time of installation. Washed risers shall be stored in plastic sheeting or kept on isolated clean racks prior to their placement in the well. When requested by the Contracting Officer's Representative, PVC pipe slips shall be used to lower the PVC pipe column into the boring. Riser pipe shall be handled using clean gloves while installing into the well bore. PVC centralizers shall be placed at the bottom of the well screen and at 40-foot intervals to the surface for 6" diameter wells ~~and at 20-foot intervals to the surface for 2" diameter wells.~~

2.2 ~~Poly (vinyl chloride) (PVC)~~ Well Screen

2.2.1 Stainless Steel Screen (Flux Wells)

The well screen shall be new and manufactured of Schedule 40, type 304 stainless steel. Well screen shall be a Government approved non-clogging, V-shaped wire-wound type. Both wire and supporting bars shall be stainless steel. Sections of screen separated by stainless steel pipe may be proposed if site conditions warrant. Screen opening width shall be equivalent to 0.020 slotted screen. Centralizers shall not be installed on the screen.

2.2.2 PVC Well Screen (6" diameter monitoring wells)

The 6" diameter monitoring well (not to exceed 60 feet) shall have continuous Vee-wire type screen with outside Vee-wire spacing equivalent to a 0.020 slotted screen. Screen segments shall be furnished in 10 and 5-foot-lengths. End fittings shall be compatible with ASTM F-480 and include an O-ring. The bottom screen section of each monitoring well screen shall be sealed watertight by means of a flush threaded end cap of the same material as the well screen.

~~Two types of well screens will be used on site at the East Gate Disposal Yard: Vee-wire and slotted. The 6" diameter monitoring well (not to exceed 60 feet) shall have continuous Vee-wire type screen with outside Vee-wire spacing equivalent to a 0.020 slotted screen. The remaining flux monitoring wells shall be schedule 40 slotted with a slot size of 0.020-inch. Screen segments shall be furnished in 10 and 5-foot-lengths. End fittings shall be compatible with ASTM F-480 and include an O-ring. The bottom screen section of each monitoring well screen shall be sealed watertight by means of a flush threaded end cap of the same material as the well screen.~~

2.3 Filter Pack

Filter pack shall consist of clean, washed, rounded to sub-rounded siliceous material (no. 10-20) free from calcareous grains or material. Organic matter, soft, friable, thin, or elongated particles are not permissible. Contractor shall furnish filter pack material in sufficient quantities to complete monitoring well installations as specified.

The artificial filter pack shall be installed around the well screen from 1-2 feet below the bottom of the screen to approximately 1-3 feet above the top of the well screen as directed by the COR. All filter pack material shall be protected from contamination prior to placement by either storing in plastic-lined bags or in a location protected from the weather and contamination. All filter pack materials shall be transported to the work site in a manner that prevents contamination by other soils, oils, and grease, and other chemicals. Filter pack materials shall be placed through a tremie pipe as the drill casing is retracted. Additions of filter pack material shall be coordinated with casing retraction so that the filter materials extend a minimum of 0.5-foot above the bottom of the drill casing. The temporary drill casing shall never be pulled above the level of the filter pack. Frequent measurements shall be made in the boring as the casing is pulled back. Measurements shall be performed by lowering a weighted sounding device into the annulus between the drill casing and well riser.

One foot of 20-40 sand will be placed on top of the filter pack (no. 10-20) above the screened interval for wells where annular grout seal is used. When pellets/chips only are used, the 20-40 sand may be eliminated.

2.4 Bentonite Well Seal

A minimum of 5 feet of bentonite pellets or chips shall be placed on top of the filter pack material. The pellets or chips shall consist of hydrated, sodium montmorillonite furnished in plastic-lined sacks or buckets from a commercial source and free of impurities that adversely impact the water quality. Bentonite for the well seal shall be commercially formed into approximately 3/8-inch- to 1/2-inch-diameter pieces. Pellets or chips shall contain no additives such as synthetic or organic polymers.

Bentonite pellets or chips shall be slowly poured into the annular space between the drill casing and the well riser as recommended by the manufacturer. The drill casing shall be pulled as the Bentonite is added to prevent creation of a bridge between the drive casing and the riser. The rate of addition should be about two minutes per 50-pound bag, unless otherwise specified by the bentonite manufacturer. A minimum of 5 feet of Bentonite shall be placed on top of the filter pack, as verified by repeated measurements with a sounding line. For well seals placed above the water table the Contractor shall use potable water to hydrate the pellets or chips. Seals shall be placed in a method that insures minimal disturbance of the filter packed zone. Annular sealant shall not be added until the bentonite plug has been allowed to hydrate at least one hour. Contractor shall use only approved water to hydrate the mixture. A minimum of one hour shall elapse between hydration of the bentonite plug and installation of the annular seal.

2.5 High Solids Bentonite Grout

High solids bentonite grout shall be used for the completion of wells if bentonite pellets or chips are not used as backfill material to ground surface. A minimum of one hour shall elapse after hydration of the bentonite plug before the grout can be installed. The bentonite grout shall be used to fill the boring from above the bentonite plug to within 1 foot of the ground surface. Sealant shall be installed using a side-discharge tremie pipe. Contractor shall supply a pump capable of handling the specified sealant mixture. As the drill casing is incrementally removed grout shall be added. The grout shall be pumped through the tremie pipe until the grout reaches a level, which will permit at least 10 feet of grout to remain in the casing annulus after removing the selected length of drill casing. Using this method, at least 20 feet of grout should be within the drill casing before removing 10 feet of drill casing or considerably more than 20 feet of grout for the removal of 10 feet of hollow stem auger. After 24 hours the Contractor shall check for grout settlement and that day add more grout to fill any depression. Incremental quantities of grout added in this manner should be recorded on the activity field log.

2.6 Protective ~~Metal~~ Casing

~~Protective metal casings shall be supplied as specified in the delivery order and meet requirements of the Buy American Act (41 USC 10a-10d). Steel casing wall thickness shall be minimum of 0.250-inch for casing diameters of 6 inches, 8 inches, and 10 inches inside diameter. Wall thickness shall be minimum of 0.375-inch for 12-inches inside diameter steel casing and for 16-inches outside diameter casing. Steel casing shall meet the requirements of ASTM A53. Only casing of standard manufacture will be accepted for use in borings. Mill reject pipe will not be allowed. The protective metal casing inside diameter shall be at least 4 inches greater than the nominal diameter of the well riser. The protective metal casing shall be fitted with a locking cap and installed so that there is a maximum 0.2 foot clearance between the top of the in-place inner well riser cap and the bottom of the protective metal casing locking cap when in the locked position. The protective metal casing shall be primed and painted yellow before positioning. The~~

yellow color for finish coats shall be as defined in ANSI Z53.1. A protective casing shall be installed around the well riser by placing the protective casing into the annular seal. Protective casing shall be maintained in a plumb position. The bottom of the protective casing shall extend a minimum of 2.5 feet below the maximum frost penetration (frost line) and shall extend at least 2.5 feet above the surface of the ground. The protective casing shall be sealed and immobilized in concrete placed around the outside of the protective casing. Dry bentonite pellets, granules, or chips shall then be placed in the annular space below ground level within the protective casing. An internal mortar collar shall be placed within the protective casing annulus from the ground surface to 6 inches above the ground surface. The mortar mix shall be (by weight) 1 part cement to 2 parts sand (the granular filter used around the well screen), with minimal water for placement. The protective casing shall have a 1/4-inch-diameter drain hole installed just above the top of the mortar collar. Coarse sand or pea gravel shall be placed in the annular space between the protective casing and the riser pipe, above the drain hole, to within 3 inches from the top of the riser pipe. The protective casing shall be provided with a heavy duty, "tamper resistant" locking mechanism. A corrosion resistant metal tag shall be affixed to the exterior and interior of the protective cover. The metal tag shall be stamped with well identification number and date of well installation.

2.6.1 Protective CPVC Casing for Flux Wells

Protective CPVC casings shall be supplied and meet requirements of the thermoplastic pipe and fitting material made with CPVC compounds meeting the requirements of ASTM Class 23447 as defined in ASTM Specification D1784. The flux wells will be an area that will be submitted to electrical heating. The CPVC materials will be needed to ensure the safety of personnel accessing these wells to prevent electrocution by stray voltage. The protective CPVC casing inside diameter shall be at least 4 inches greater than the nominal diameter of the well riser. The protective CPVC casing shall be fitted with a locking cap of similar material and installed so that there is a maximum 0.2 foot clearance between the top of the in-place inner well riser cap and the bottom of the protective CPVC casing locking cap when in the locked position. The protective casing shall be primed and painted yellow before positioning. The yellow color for finish coats shall be as defined in ANSI Z53.1.

2.6.2 Protective Metal Casing for 6" diameter wells

Protective metal casings shall be supplied as specified in the delivery order and meet requirements of the Buy American Act (41 USC 10a-10d). Steel casing wall thickness shall be minimum of 0.250-inch for casing diameters of 6 inches, 8 inches, and 10 inches inside diameter. Wall thickness shall be minimum of 0.375-inch for 12-inches inside diameter steel casing and for 16-inches outside diameter casing. Steel casing shall meet the requirements of ASTM A53. Only casing of standard manufacture will be accepted for use in borings. Mill reject pipe will not be allowed. The protective metal casing inside diameter shall be at least 4 inches greater than the nominal diameter of the well riser. The protective metal casing shall be fitted with a locking cap and installed so that there is a maximum 0.2 foot clearance between the top of the in-place inner well riser cap and the bottom of the protective metal casing locking cap when in the locked position. The protective metal casing shall be primed and painted yellow before positioning. The yellow color for finish coats shall be as defined in ANSI Z53.1.

A protective metal casing shall be installed around the well riser by placing the protective metal casing into the annular seal. Protective casing shall be maintained in a plumb position. The bottom of the protective metal casing shall extend a minimum of 2.5 feet below the maximum frost penetration (frost line) and shall extend at least 2.5 feet above the surface of the ground. The protective metal casing shall be sealed and immobilized in concrete placed around the outside of

~~the protective metal casing. Dry bentonite pellets, granules, or chips shall then be placed in the annular space below ground level within the protective metal casing. An internal mortar collar shall be placed within the protective casing annulus from the ground surface to 6 inches above the ground surface. The mortar mix shall be (by weight) 1 part cement to 2 parts sand (the granular filter used around the well screen), with minimal water for placement. The protective casing shall have a 1/4-inch-diameter drain hole installed just above the top of the mortar collar. Coarse sand or pea gravel shall be placed in the annular space between the protective casing and the riser pipe, above the drain hole, to within 3 inches from the top of the riser pipe. The metal protective casing shall be provided with a heavy duty, "tamper resistant" locking mechanism. A corrosion resistant metal tag shall be affixed to the exterior and interior of the protective cover. The metal tag shall be stamped with well identification number and date of well installation.~~

2.7 Concrete Pad

Concrete for the well pads may either be pre-packaged or poured concrete. Pre-packaged materials for concrete shall conform to ASTM C 387 normal weight, normal strength concrete. The dry materials shall be combined with potable water and mixed in an approved mixer or container until uniform in consistency and color. Water shall be limited to the minimum amount possible. Poured concrete shall consist of clean, hard and durable aggregate with not less than 5 sacks of Portland cement per cubic yard of concrete. The maximum aggregate size shall not exceed 1 inch. The ratio of coarse aggregate to fine aggregate (passing No. 4 U.S. Standard Sieve) shall be approximately 1.5 to 1 by volume.

Provide an appropriate base course for frost heave beneath the concrete pad. A minimum 3-foot-square, 6-inch thick concrete pad sloped away from the well shall be constructed around the protective metal casing. The pad shall extend 4 inches below grade and 2-inches above grade. The ground immediately surrounding the top of the well shall be sloped away from each well.

2.8 Groundwater Sampling from Open Borehole

The Contractor shall, upon request of the COR, terminate drilling at a depth chosen by the COR so that the government may collect a groundwater sample from beneath the bottom of the temporary steel casing. The Contractor shall have available a two foot section of 2-inch diameter schedule 40 PVC, 20 slot screen and adequate lengths of 2-inch schedule 40 PVC riser to place the screen at the requested temporary termination depth of the boring. The Contractor shall clean out the borehole to the requested depth before placing the temporary screen and riser to the bottom of the borehole. The steel casing shall be retracted at least two feet to expose the screen to the formation and let the formation collapse around the screen. The Contractor shall provide a pump to develop the well by pumping until turbidity has been reduced to an acceptable level as determined by the COR. The pump shall be capable of pumping at a minimum rate of 2 gpm. Government personnel will then deploy a separate sampling pump provided by the Government down the temporary casing and collect a groundwater sample. The Contractor shall remain on standby while the government collects a sample. Upon completion of sample collection, the Contractor shall remove the temporary PVC casing and screen and continue drilling. The contractor shall decontaminate the PVC screen and riser between sampling events as specified in section 10. Waste water shall be handled as specified in Section 11.

2.9 Special Deep Two-Inch Monitoring Well Installation Requirements.

Some of the groundwater sampling from an open borehole (Section 2.8) will be collected while drilling deep monitoring wells under CLIN 0001AC. The analytical data collected from these borings will be used to determine the screen interval for the first three deep wells installed. The Contractor shall have an adequate amount of steel drill casing on site to allow the drill casing for

the first three borings for these wells to be left in the ground simultaneously until analytical data are available to allow for design of the screen interval. Steel casing shall be removed from each borehole as the wells are completed.

3 MONITORING WELL DEVELOPMENT

The Contractor shall develop wells within 48 hours of well installation and completion. Equipment used in the development shall be cleaned as specified in Section 11 "Sanitation of Equipment," prior to use in each monitoring well. Development shall be performed using mechanical surging and pumping for the standard type 2" monitoring well installations as defined in WAC 173-160 and as described in ASTM D 5521. At no time shall air be introduced into the formation during the development procedure. Well development for all monitoring wells shall continue until the discharge water is sufficiently clear in the opinion of the government geologist who will be measuring several groundwater parameters including pH, temperature, turbidity, and conductivity before and during the development process. Development water shall be contained.

The surge block used in the standard type monitoring well shall have a diameter slightly less, approximately 1/8-inch than the inside diameter of the PVC well casing. The well casing shall be pumped prior to surging to insure that an adequate flow of water is entering the well. Surging shall begin slowly across the entire length of the well screen. The pace of the surging motion shall be gradually increased until the surge block has a vertical velocity of three to five feet per second. Well surging shall be concurrent with pumping to clean accumulation of sediment in the well and to allow the on-site geologist to determine the progress of the well development. Development shall continue for a minimum of four hours or until the site geologist determines that the well is adequately developed for sampling purposes. At the end of development, the driller shall clean all sediment from the bottom of the well. Development water shall be pumped into the Baker Tank. Wells with NAPL present may not be developed. The designated Government Representative will make the determination whether to develop wells with NAPL present.

Development of the 6" diameter wells shall be by either surging and pumping as detailed in the above paragraph or by high-velocity hydraulic jetting (jetting) with air-lift pump as detailed in ASTM D 5521. If jetting/air lift pumping is selected as the development method, the jetting tool shall have four (4) nozzles equally spaced around the circumference of the tool. The nozzle outlets shall be within 1/2-inch of the inside diameter of the well screen in order to maximize water jet effectiveness beyond the screen. The air-lift pump employs an air line inside an eductor pipe which allows air, water, and solids to be removed from the well while preventing air injection into the formation. At no time shall air be introduced directly to the formation during the development procedure.

4 SUPPLEMENTARY BORINGS

Borings abandoned by the Contractor or rejected by the Contracting Officer's Representative for any reason, not the fault of the Government (i.e. misalignment, mechanical failure of the drilling equipment, Contractor negligence, blockage of boring by tools or drilling equipment, etc.) shall be permanently sealed with grout as defined in Section 2.5, or with cement-silica grout as defined in Section 4 if in NAPL Area 3. A supplementary boring, drilled and completed in accordance with these specifications shall be drilled within one foot from the abandoned boring. The Contracting Officer's Representative will approve the exact location. No payment will be made for borings abandoned by the Contractor or rejected by the Contracting Officer.

5 DRILLING PERMITS AND PERFORMANCE REQUIREMENTS

The Contractor shall be responsible for obtaining permits, licenses, filing drill/decommission boring reports, filing monitoring well reports, paying fees and other requirements necessary for prosecution of the work and

paying all costs thereof. All work and materials for the installation of the monitoring wells shall conform to the requirements of WAC Chapter 173-160. Access to and preparation of each monitoring well site for drilling is the responsibility of the Contractor. The Government shall obtain underground utility clearances (digging permits) through the office of Public Works on Fort Lewis before drilling will take place.

6 APPLICABLE PUBLICATIONS

The publications listed below form a part of this specification to the extent referenced and are referred to by basic designation only. Standards shall conform to latest edition at time of bidding.

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI Z 535.1 Safety Color Code

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

<u>ASTM A 312</u>	<u>Seamless, Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes</u>
ASTM C 387	(Rev-95) Packaged, Dry, Combined Materials for Mortar and Concrete
ASTM C 150	Portland Cement
ASTM D 1784	Rigid Poly (Vinyl Chloride) (PVC) compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds
ASTM D 1785	Poly(Vinyl Chloride)(PVC) Plastic Pipe, Schedules 40, 80, and 120
ASTM D 2467	Socket Type Poly (Vinyl Chloride) PVC Plastic Pipe Fittings, Schedule 80
ASTM D 5088	Decontamination of Field Equipment Used at Non-Radioactive Waste Sites
ASTM D 1889	Turbidity of Water
ASTM D 5092	Design and Installation of Ground Water Monitoring Wells in Aquifers
ASTM D 5221	Development of Ground-Water Monitoring Wells in Granular Aquifers
ASTM F 480	Thermoplastic Well Casing Pipe and Couplings Made in Standard Dimension ratios (SDR), Sch 40 and Sch 80
CODE OF FEDERAL REGULATIONS (CFR)	
29 CFR 1910.120	Hazardous Waste Operations and Emergency Response
40 CFR 262	Standards Applicable to Generators of Hazardous Waste

40 CFR 302	Designation, Reportable Quantities, and Notification
49 CFR 172	Hazardous Materials Table, Special Provisions, Hazardous Materials, Communications, Emergency Response Information, and Training Requirements
NSF INTERNATIONAL (NSF)	
NSF ANSI/NSF 14	Plastics Piping Components and Related Materials
U.S. ARMY CORPS OF ENGINEERS (USACE)	
EM 385-1-1	U.S. Army Corps of Engineers Safety and Health Requirements Manual
EM 1110-1-4000	Monitoring Well Design, Installation, and Documentation at HTW Sites

These documents may be accessed on the internet at the following address:
<http://www.usace.army.mil/inet/usace-docs/eng-manuals/em.htm>

ER 385-1-92	Safety and Occupational Health Document Requirements for Hazardous, Toxic, and Radioactive Waste (HTRW) Activities.
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STATE OF WASHINGTON, WASHINGTON ADMINISTRATIVE CODE (WAC)

WAC 173-160	(Rev 23 April 1998) Minimum Standards for Construction and Maintenance of Wells
WAC 173-162	Regulation and Licensing of Well Contractors and Operators

ENVIRONMENTAL PROTECTION AGENCY (EPA)

625/R-93/003a	Subsurface Characterization and Monitoring Techniques – a Desk Reference Guide – Volume I: Solids and Ground Water Appendices A and B
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7 SUBMITTALS

Submittals required by this section shall be for Government approval (GA) or for information only (FIO), and shall be submitted as stated below.

7.1 State of Washington Driller License (FIO).

Submit copies of the Contractor's and well driller's State of Washington Licenses.

7.2 Health and Safety Training.

The Contractor shall submit evidence that his on site employees and his subcontractor's on site employees have attended a 40-hour personal protection and safety class and yearly refresher courses under 29 CFR 1910.120. Any Contractor personnel supervising on site shall have an additional 8 hours of supervisory

training per 29 CFR 1910.120. Included, but not restricted to in this requirement, is a yearly medical monitoring program and a respirator fit and maintenance program for hazardous waste worker personnel. All personnel required to use personal protective equipment (PPE) shall meet the training and medical monitoring requirements of 29 CFR 1910.120. It shall be the responsibility of the Contractor to ensure that all work carried out is performed in a manner that is safe and protective of human health and the environment in accordance with these specifications, 29 CFR 1910, and the U.S. Army Corps of Engineers Safety and Health Requirements Manual (EM 385-1-1). Work at the EGDY will be initiated in personal protection level D. The Contractor shall provide and require the use of PPE including tyvek suit, and gloves, if conditions require it. The Contractor will be held responsible for ensuring that operations under its control do not jeopardize the health and safety of public or private sector workers, or the environment.

7.3 Site Safety and Health Plan (GA).

The Contractor shall follow the requirements set forth for the site in an existing Site Safety and Health Plan (SSHP) developed by Thermal Remediation Services Inc. (TRS) for the USACE. The Contractor shall work with the TRS field representative to coordinate activities on site. The Contractor shall review the SSHP by TRS dated August 2003 (Attached) and all Contractor site personnel must acknowledge they understand and will comply with its contents before site work begins. Additionally, the Contractor shall submit a copy of their company's standard operating procedures for safe drilling and a site-specific Activity Hazard Analysis and Accident Prevention Plan (See Section 9 AHA & APP). Mobilization activities may start prior to submittal of the required data. Failure to provide the required information will result in delayed project startup at the Contractor's expense.

7.4 Drilling Start Cards, (FIO).

Copies of such documents shall be submitted to the Contracting Officer's Representative at the beginning of the work.

7.5 Borehole Decommissioning Records, (FIO).

The Contractor shall submit decommissioning records to the Contracting Officer's Representative and to Washington State Department of Ecology in accordance with WAC 173-160.

7.6 Driller's Log (FIO).

Daily record of drilling operations for each boring drilled and for each monitoring well installed, including development, shall be submitted to the Contracting Officer's Representative at the conclusion of each soil boring and monitoring well, or as otherwise directed.

7.7 Tool Lubricant (GA).

Chemical analytical data on lubricant constituent compounds shall be submitted to the Contracting Officer's Representative for approval prior to commencement of drilling. The Contractor shall use only hydrocarbon free tool joint lubrication in making up drill strings. Lubrication of tool joints shall be conducted in such a manner as to avoid excessive application and subsequent contamination of any monitoring well. The brand name and manufacturer of the lubricant shall be noted on the daily log and provided as a submittal.

8 ACTIVITY HAZARD ANALYSIS (AHA) AND ACCIDENT PREVENTION PLAN (APP)

The AHA shall specifically list, in chronological order, the specific steps of each task, the specific hazard(s) associated with the task, the specific engineering control technique(s)/method(s), administrative controls (including work practices), and specific personal protective equipment (PPE) which will be used to mitigate

said hazards. The AHA shall be presented in the table format depicted in Figure 1-1 of Section 1 of EM 385-1-1. The AHA shall include all work that is to be performed by subcontractors. The APP shall meet all of the basic requirements as delineated in Section 1 (01.a.07) and Appendix A, of EM 385-1-1, as well as 29 CFR 1910.120. The Contractor shall not commence on site work activities, with the exception of mobilization to the work site, until the APP has been approved by the Contracting Officer's Representative. The APP shall be made available to all persons entering onto the work site(s) in accordance with EM 385-1-1. A copy of the written APP shall be maintained on site. All site workers shall be current in the training requirements specified in 29 CFR 1910.120 and proof of said training, for both supervisory personnel as well as non-supervisory personnel, shall be included in the APP. The Contractor's Accident Prevention Plan shall clearly state, in enforceable language, the corrective measures that will be taken to preclude workers and equipment from being damaged or imperiled by the work activities required to perform the work. The Accident Prevention Plan shall include all of the activities of any subcontractors and shall demonstrate and ensure the safety and health of subcontractor personnel.

9 SPILL AND DISCHARGE CONTROL

Plastic sheeting shall be placed underneath the drilling rig and bermed or otherwise configured to contain potential leaks of hydraulic fluid, oil, or other contaminants. The Contractor shall provide spill response materials including, but not limited to the following: containers, adsorbents, shovels, and personal protective equipment. Spill response materials shall be available at all times in which hazardous materials/wastes are being handled or transported. Spill response materials shall be compatible with the type of materials and contaminants being handled.

10 SANITATION OF EQUIPMENT

A decontamination pad shall be constructed by the Contractor to prevent infiltration of decontamination water. All water generated from decontamination shall be containerized and place in the Contractor provided 20,000 gallon Baker Tank. Decontamination shall be done in accordance with ASTM D 5088. After arrival at the EGDY site and prior to commencement of drilling, all drilling equipment to include rigs, support vehicles, water tanks, drill casings, rods, core barrels, tools, circulation tanks, well development equipment, and tremie pipes, shall be cleaned with steam or pressurized hot water using water from a Government approved source. Core barrels shall also receive a final rinse with approved water. All the equipment listed above shall be devoid both inside and outside of any asphalt, bituminous or other encrusting or coating materials such as grease, grout, and soil. When the equipment is cleaned, the cleaning shall be carried out in such a location that the operation will not adversely impact the ongoing work. Cleaning shall also occur between each boring/well site. After the onsite cleaning, only the equipment used or soiled at a particular boring or well requires cleaning between boring sites. Unless circumstances are specified otherwise, water tank interiors will not require cleaning between each boring/well at a given project. All equipment shall be decontaminated before it is removed from the project site.

11 CONTAINERIZATION OF INVESTIGATION DERIVED WASTE (IDW) AND SOIL CORES

11.1 Drill Cuttings

All drill cuttings brought to the surface during drilling shall be temporarily containerized in Contractor provided (Government approved) containers. In addition, the Contractor shall haul all containers from each drill site to a Government approved location at the EGDY and empty the containerized cuttings onto a

designated stockpile. The stockpile of cuttings at EDGY shall be covered with plastic sheeting by the Contractor.

11.2 Waste Water

Water brought to the surface during drilling, decontamination, and development shall be contained. All water contained shall be transferred to a Baker Tank stationed as directed by the COR. The Contractor provided Baker Tank shall provide a 20,000 gallon capacity Baker Tank to contain all water generated during all activities. All water shall be allowed to settle for a minimum of two weeks before transferring to a separate 20,000 gallon Baker Tank that is a part of the thermal remediation system. The Contractor will pump water down to the settled sediments (solids), minimizing the amount of fines delivered to TRS' tank after the minimum two weeks of settlement has occurred. Water transferred to TRS' tank must be clear and free of sediment. The Contractor is responsible for removal of all solids and cleaning of the Baker Tank and can be re-used as necessary. All solids will be placed in a designated spoils stockpile along with all drill cuttings.

11.3 Additional Requirements

The Contractor shall furnish all labor, materials and equipment, and perform all work to satisfactorily accomplish all activities in sections 12.1 and 12.2. In addition the Contractor shall install, maintain and operate plastic lined drum/container containment area with berm, and all temporary drainage, piping, and other equipment needed to prevent the job site from being inundated.

The Contractor shall handle containerized material in a manner to protect the workers and the public in accordance with all applicable Federal, state, and local laws and regulations. The Contractor shall develop, implement, and enforce practices and procedures for safe handling of waste such as minimizing handling and using equipment and procedures that isolate workers from potentially hazardous materials to limit the risks to site personnel and the public.

12 WELL ACCEPTANCE

It is the responsibility of the Contractor to properly install and develop all monitoring wells according to the requirements of this contract so that they are suitable for the intended purpose. If the Contractor installs wells that are not functional or not in accordance with these specifications, the Contracting Officer will disapprove the well and direct the Contractor to repair or replace it, and to decommission the disapproved well in accordance with this specification.

13 SITE CLEAN UP

After completion of the work, tools, appliances, surplus materials, temporary drainage, rubbish, and debris incidental to work shall be removed. Slurry, drill cuttings, and other solid or liquid material bailed, pumped, or otherwise removed from the borehole during drilling, well installation, and well development procedures; and fluids from material/equipment decontamination activities shall be disposed of as specified. Excavation and vehicular ruts shall be backfilled and dressed to conform with the existing landscape. Utilities, structures, roads, fences, or any other pre-existing item which must be repaired or replaced due to the Contractor's negligence will be the responsibility of the Contractor and repair or replacement shall be accomplished prior to completion of this contract.

14 RECORDS

The Contractor's drill operator shall maintain an accurate and precise chronological daily log of events. The following items shall be included in this daily log:

- (a) beginning of work shift (name of driller, time, date, and location)
- (b) measure static water level at beginning of each shift
- (c) delays in work (times and circumstances)
- (d) any significant occurrence in performing work
- (e) start and stop time of hourly payment items
- (f) equipment failures
- (g) end of shift casing depth and height left above ground surface
- (h) end of work shift (time and date)
- (i) movement to new boring location,
- (j) daily tabulation of quantities for each pay item
- (k) any pertinent comments concerning the daily performance
- (l) soil boring decommissioning methods with material quantities used

Contractor shall furnish a water level measuring device accurate to 0.01 foot and capable of measuring water level to maximum depth of any boring specified in order to accomplish sub-item (b) above.

15. MEASURE AND PAYMENT

The contract price for each item shall constitute full compensation for furnishing all plant, labor, materials, equipment, supervision, and incidentals, and performing all operations necessary to air rotary **or sonic** drill, install and complete the items in accordance with the SCOPE. Payment for each item shall be considered as full compensation, notwithstanding that minor features may not be specifically mentioned herein. When submitting invoices for payment, all fractional quantities shall be rounded to the nearest whole unit. The Contractor will not be compensated for loss of time or equipment due to breakdown of equipment, lack of proper equipment as determined by the Contracting Officer, labor shortages or disputes, delay in obtaining materials, or for any other reason not directly the fault of the Government. Items for which no separate payment is provided, shall be considered as incidental to the performance of the work with which it is mentioned. The quantities listed on the bid schedule are approximate total quantities required. The Contractor will only be paid for quantities of items (e.g., Linear Feet, Hour, Job, Month) actually completed.

15.1 Measurements

- 1) Linear Feet (LF): Measurement by linear feet shall be to the nearest linear foot. Drilling depth, decommissioning of borings, monitoring well installation, well casings, and well screens shall be measured by linear distance. Measurement of well depth shall be vertical measurement in linear feet (LF) from original ground surface.
- 2) Hour (HR): Measurement by the hour will be to the nearest whole hour. Measurement will be to the nearest hour and applies to drill crew working under Level D for standby time, monitoring well development, and geologist.
- 3) Job (JB): Measurement by the job will be measured for payment by completion of all activities associated with a job and will be paid in a lump sum for that particular job. Mobilization and demobilization shall be measured as a job lump sum.

- 4) Month (MO): Measurement by the month will be to the nearest whole month. Measurement by month applies to the 20,000 gallon Baker Tank and includes all costs including mobilization, demobilization, rental, and cleaning.

15.2 Payments

15.2.1 Item No. 0001AA (BASE) – Mobilization and Demobilization for Air Rotary or Sonic Drill Rig.

Payment will be made at contract lump sum price for Item No. 0001AB, Mobilization and Demobilization, payment of which shall constitute full compensation for transportation of all plant, material, equipment, personnel, and supplies to and from Contractor's staging/equipment yard to the work site at the East Gate Disposal Yard site. Sixty percent of Item: Mobilization and Demobilization will be paid following completion of mobilization to the work area, including furnishing complete assembly in working order of all equipment necessary to perform the required drilling, equipment sanitizing, and well closure. The remaining 40 percent of Item: Mobilization and Demobilization will be paid when all equipment has been removed from the area, cleanup accomplished to the satisfaction of the Contracting Officer, and demobilization is complete. The preparation, submittal, and necessary revisions for the required Activity Hazard Analysis and Accident Prevention Plan will be incidental to this item of work. The Contractor-provided portable toilet will be incidental to this item of work.

15.2.2 Item No. 0001AB (BASE) – Drill and Install thirty-two (32) 2" PVC Stainless Steel Monitoring Wells by Air Rotary or Sonic Drill Rig, NTE 50 feet depth.

Payment will be made at the contract unit price for Item No. 0001AB: Air rotary or sonic drilling and installation of thirty-two (32) 2" PVC stainless steel groundwater monitoring wells, NTE 50 ft., complete and in place. Requirement shall be inclusive of 2" schedule 40 type 304 stainless steel PVC casings, 40 ft screens (slotted v-wire wrapped) (upper screen shall cross the water table), equipment decontamination, and above ground protection. Payment shall be full compensation for all equipment, labor, drilling, materials, supplies, required permits, and incidental costs for the work performed under the contract specifications. The furnishing and installing of ground protection materials will be incidental to this item of work. The Contractor shall be responsible for transporting and disposal of all investigative derived waste (IDW) to the Baker Tank described in Section 11. No payment will be made for incomplete/unusable wells disapproved by the Government due to installation practices not in accordance with this specification or drilling refusal. Payment will be made only for the actual linear feet completed for each monitoring well installed.

15.2.3 Item No. 0001AC (BASE) – Drill and Install ten (10) 2" PVC Stainless Steel Monitoring Wells by Air Rotary or Sonic Drill Rig, NTE 80 feet depth.

Payment will be made at the contract unit price for Item No. 0001AC: Air rotary drilling and installation of ten (10), 2" PVC stainless steel, groundwater monitoring wells, NTE 80 ft., complete and in place. Requirement shall be inclusive of 2" schedule 40 type 304 stainless steel PVC casings, 30 ft screens (slotted v-wire wrapped), equipment decontamination, and above ground protection. Payment shall be full compensation for all equipment, labor, drilling, materials, supplies, required permits, and incidental costs for the work performed under the contract specifications. The furnishing and installing of ground protection materials will be incidental to this item of work. The Contractor shall be responsible for transporting and disposal of all IDW to the Baker Tank described in Section 11. No payment will be made for incomplete/unusable wells disapproved by the Government due to installation practices not in accordance with this specification or drilling refusal. Payment will be made only for the actual linear feet completed for each monitoring well installed.

15.2.4 Item No. 0001AD (BASE) – Drill and Install Seven (7) 6" PVC Monitoring Wells by Air Rotary or Sonic Drill Rig, NTE 60 feet depth.

Payment will be made at the contract unit price for Item No. 0001AD: Air rotary **or sonic** drilling and installation of seven (7) 6" PVC groundwater monitoring wells, NTE 60 ft., complete and in place. Requirement shall be inclusive of 2" schedule 40 PVC casings, Vee-wire screens (screens shall cross the water table), equipment decontamination, and above ground protection. Payment shall be full compensation for all equipment, labor, drilling, materials, supplies, required permits, and incidental costs for the work performed under the contract specifications. The furnishing and installing of ground protection materials will be incidental to this item of work. The Contractor shall be responsible for transporting and disposal of all IDW to the Baker Tank described in Section 11. No payment will be made for incomplete/unusable wells disapproved by the Government due to installation practices not in accordance with this specification or drilling refusal. Payment will be made only for the actual linear feet completed for each monitoring well installed.

15.2.5 Item No. 0001AE (BASE) – Monitoring Well Development.

Payment will be made at the contract unit price for Item No. 0001AE: Monitoring Well Development, payment of which shall be full compensation for furnishing all plant, labor, materials, equipment, and supervision for well development. Payment will be made only for the actual number of hours expended in developing monitoring wells.

15.2.6 Item No. 0001AF (BASE) – Standby Time (Air Rotary **or Sonic** Drill Rig Crew and Equipment).

Payment will be made at the contract unit price for Item No. 0001AF: Standby Time, Air Rotary **or Sonic** Drill Rig Crew and Equipment, payment of which shall constitute full compensation for the standby idle time of equipment and crew only when the Contracting Officer's Representative requests that the Contractor stop work due to the Government's need to review data and make decisions. No more than 8 hours of standby time will be paid per normal work day. Standby time will not be paid during periods when the crew and equipment would normally have otherwise been in idle status. **Standby time will be used to compensate the Contractor for time to set temporary casing, screen and filter pack for government groundwater sampling of the open borehole and time spent waiting for the government to collect a sample.** Standby time will not be used to conduct daily and/or weekly safety meetings. Payment will be made only for the actual number of hours spent for standby.

15.2.7 Item No. 0001AG (BASE) – Mobilization and Demobilization of 20,000 gallon Baker Tank.

Payment will be made at contract unit price for Item No. 0001AG: Mobilization and Demobilization of 20,000 gallon Baker Tank, payment of which shall constitute full compensation for transportation of tank, cleaning, and personnel. Payment will be made following completion of mobilization to the work area, including furnishing complete assembly, cleaning of tank and demobilization is complete to the satisfaction of the Contracting Officer.

15.2.8 Item No. 0001AH (BASE) –Rental of 20,000 gallon Baker Tank.

Payment will be made at contract unit price for Item No. 0001AH: Rental of 20,000 gallon Baker Tank, payment of which shall constitute full compensation for monthly rental fee of tank and personnel. Payment will be made following completion of the cleaning of tank and demobilization is complete to the satisfaction of the Contracting Officer. Payment will be made only for the actual number of months that tank is at the site.

15.2.9 Item No. 0002AA (OPTIONAL) – Mobilization and Demobilization of 20,000 gallon Baker Tank .

Payment will be made at contract unit price for Item No. 0002AA: Mobilization and Demobilization of 20,000 gallon Baker Tank, payment of which shall constitute full compensation for transportation of tank, cleaning,

and personnel. Payment will be made following completion of mobilization to the work area, including furnishing complete assembly, cleaning of tank and demobilization is complete to the satisfaction of the Contracting Officer.

15.2.10 Item No. 0002AB (OPTIONAL) – Rental of 20,000 gallon Baker Tank.

Payment will be made at contract unit price for Item No. 0002AB: Rental of 20,000 gallon Baker Tank, payment of which shall constitute full compensation for monthly rental fee of tank and personnel. Payment will be made following completion of the cleaning of tank and demobilization is complete to the satisfaction of the Contracting Officer. Payment will be made only for the actual number of months that tank is at the site.

BID SCHEDULE

BASE ITEMS					
Item No.	Description of Item	Quantity	Unit	Unit Price	Amount
0001AA	Mobilization/Demobilization of Air Rotary <u>or Sonic</u> Drill Rig.	1	Job		
0001AB	Drill and Install 32 Shallow 2" PVC <u>stainless steel</u> Monitoring Wells, each not to exceed 50 feet depth, with 40 ft screens.	1600	LF		
0001AC	Drill and Install 10 each - 2" PVC <u>stainless steel</u> Monitoring Wells, not to exceed 80 feet depth, with 30 ft screens.	800	LF		
0001AD	Drill and Install 7 Shallow 6" PVC Monitoring Wells, each not to exceed 60 feet depth, with 50ft screens.	420	LF		
0001AE	Monitoring Well Development.	392	HR		
0001AF	Standby Time, <u>Drill Crew and</u> Equipment only (Air Rotary <u>or Sonic</u>)	<u>40</u>	HR		
0001AG	Mob and Demobilization of 20,000 gallon Baker Tank.	1	Job		
0001AH	Mob and Demob, Rental & Cleaning of 20,000 gallon Baker Tank.	3	MO		
TOTAL ALL BASE ITEMS 0001AA THROUGH 0001AG					
OPTIONAL ITEM					
Item No.	Description of Item	Quantity	Unit	Unit Price	Amount
0002AA	Mob and Demobilization of 20,000 gallon Baker Tank.	1	Job		
0002AB	Mob and Demob, Rental & Cleaning of 20,000 gallon Baker Tank.	3	MO		
TOTAL FOR OPTIONAL LINE ITEMS 0002AA					

ACCOUNTING AND APPROPRIATION DATA

AA: 21520200000 088082 25165082J249300813000 ENVR 35026
COST 000000000000
CODE:
AMOUNT: \$218,940.00

CLAUSES INCORPORATED BY REFERENCE

52.212-4	Contract Terms and Conditions--Commercial Items	OCT 2003
52.233-2	Service Of Protest	AUG 1996
52.236-13 Alt I	Accident Prevention (Nov 1991) - Alternate I	NOV 1991
52.242-17	Government Delay Of Work	APR 1984
52.243-1	Changes--Fixed Price	AUG 1987
52.249-4	Termination For Convenience Of The Government (Services) (Short Form)	APR 1984
252.204-7004 Alt A	Central Contractor Registration (52.204-7) Alternate A	NOV 2003

CLAUSES INCORPORATED BY FULL TEXT

Successor Contracting Officers (52.201-4001)

The Contracting Officer who signed this contract is the primary Contracting Officer for the contract. Nevertheless, any Contracting Officer assigned to the Seattle District and acting within his/her authority may take formal action on this contract when a contract action needs to be taken and the primary Contracting Officer is unavailable.

52.212-5 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS--COMMERCIAL ITEMS (APR 2005)

(a) The Contractor shall comply with the following Federal Acquisition Regulation (FAR) clauses, which are incorporated in this contract by reference, to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

(1) 52.233-3, Protest After Award (AUG 1996) (31 U.S.C. 3553).

(2) 52.233-4, Applicable Law for Breach of Contract Claim (OCT 2004) (Pub. L. 108-77, 108-78).

(b) The Contractor shall comply with the FAR clauses in this paragraph (b) that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items: (Contracting Officer check as appropriate.)

___ (1) 52.203-6, Restrictions on Subcontractor Sales to the Government (JUL 1995), with Alternate I (OCT 1995) (41 U.S.C. 253g and 10 U.S.C. 2402).

___ (2) 52.219-3, Notice of HUBZone Small Business Set-Aside (Jan 1999) (U.S.C. 657a).

___ (3) 52.219-4, Notice of Price Evaluation Preference for HUBZone Small Business Concerns (Jan 1999) (if the offeror elects to waive the preference, it shall so indicate in its offer) (U.S.C. 657a).

___ (4) (i) 52.219-5, Very Small Business Set-Aside (JUNE 2003) (Pub. L. 103-403, section 304, Small Business Reauthorization and Amendments Act of 1994).

____ (ii) Alternate I (MAR 1999) to 52.219-5.

____ (iii) Alternate II to (JUNE 2003) 52.219-5.

X (5)(i) 52.219-6, Notice of Total Small Business Set-Aside (JUNE 2003) (15 U.S.C. 644).

____ (ii) Alternate I (OCT 1995) of 52.219-6.

____ (iii) Alternate II (MAR 2004) of 52.219-6.

____ (6)(i) 52.219-7, Notice of Partial Small Business Set-Aside (JUNE 2003) (15 U.S.C. 644).

____ (ii) Alternate I (OCT 1995) of 52.219-7.

____ (iii) Alternate II (MAR 2004) of 52.219-7.

____ (7) 52.219-8, Utilization of Small Business Concerns (MAY 2004) (15 U.S.C. 637 (d)(2) and (3)).

____ (8)(i) 52.219-9, Small Business Subcontracting Plan (JAN 2002) (15 U.S.C. 637(d)(4)).

____ (ii) Alternate I (OCT 2001) of 52.219-9

____ (iii) Alternate II (OCT 2001) of 52.219-9.

____ (9) 52.219-14, Limitations on Subcontracting (DEC 1996) (15 U.S.C. 637(a)(14)).

____ (10)(i) 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns (JUNE 2003) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323) (if the offeror elects to waive the adjustment, it shall so indicate in its offer).

____ (ii) Alternate I (JUNE 2003) of 52.219-23.

____ (11) 52.219-25, Small Disadvantaged Business Participation Program--Disadvantaged Status and Reporting (OCT 1999) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).

____ (12) 52.219-26, Small Disadvantaged Business Participation Program--Incentive Subcontracting (OCT 2000) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).

____ (13) 52.219-27, Notice of Total Service-Disabled Veteran-Owned Small Business Set-Aside (May 2004).

X (14) 52.222-3, Convict Labor (JUNE 2003) (E.O. 11755).

X (15) 52.222-19, Child Labor--Cooperation with Authorities and Remedies (Jun 2004) (E.O. 13126).

X (16) 52.222-21, Prohibition of Segregated Facilities (FEB 1999).

X (17) 52.222-26, Equal Opportunity (APR 2002) (E.O. 11246).

X (18) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (DEC 2001) (38 U.S.C. 4212).

X (19) 52.222-36, Affirmative Action for Workers with Disabilities (JUN 1998) (29 U.S.C. 793).

____ (20) 52.222-37, Employment Reports on Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (DEC 2001) (38 U.S.C. 4212).

____ (21) 52.222-39, Notification of Employee Rights Concerning Payment of Union Dues or Fees (DEC 2004) (E.O. 13201).

____ (22)(i) 52.223-9, Estimate of Percentage of Recovered Material Content for EPA-Designated Products (AUG 2000) (42 U.S.C. 6962(c)(3)(A)(ii)).

____ (ii) Alternate I (AUG 2000) of 52.223-9 (42 U.S.C. 6962(i)(2)(C)).

____ (23) 52.225-1, Buy American Act--Supplies (JUNE 2003) (41 U.S.C. 10a-10d).

____ (24)(i) 52.225-3, Buy American Act--Free Trade Agreements--Israeli Trade Act (Jan 2005) (41 U.S.C. 10a-10d, 19 U.S.C. 3301 note, 19 U.S.C. 2112 note, Pub. L. 108-77, 108-78, 108-286).

____ (ii) Alternate I (JAN 2004) of 52.225-3.

____ (iii) Alternate II (JAN 2004) of 52.225-3.

____ (25) 52.225-5, Trade Agreements (Jan 2005) (19 U.S.C. 2501, et seq., 19 U.S.C. 3301 note).

____ (26) 52.225-13, Restrictions on Certain Foreign Purchases (MAR 2005) (E.o.s, proclamations, and statutes administered by the Office of Foreign Assets Control of the Department of Treasury).

____ (27) 52.225-15, Sanctioned European Union Country End Products (FEB 2000) (E.O. 12849).

____ (28) 52.225-16, Sanctioned European Union Country Services (FEB 2000) (E.O. 12849).

____ (29) 52.232-29, Terms for Financing of Purchases of Commercial Items (FEB 2002) (41 U.S.C. 255(f), 10 U.S.C. 2307(f)).

____ (30) 52.232-30, Installment Payments for Commercial Items (OCT 1995) (41 U.S.C. 255(f), 10 U.S.C. 2307(f)).

X____ (31) 52.232-33, Payment by Electronic Funds Transfer--Central Contractor Registration (OCT 2003) (31 U.S.C. 3332).

X____ (32) 52.232-34, Payment by Electronic Funds Transfer--Other than Central Contractor Registration (MAY 1999) (31 U.S.C. 3332).

____ (33) 52.232-36, Payment by Third Party (MAY 1999) (31 U.S.C. 3332).

____ (34) 52.239-1, Privacy or Security Safeguards (AUG 1996) (5 U.S.C. 552a).

____ (35)(i) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (APR 2003) (46 U.S.C. Appx 1241 and 10 U.S.C. 2631).

____ (ii) Alternate I (APR 2003) of 52.247-64.

(c) The Contractor shall comply with the FAR clauses in this paragraph (c), applicable to commercial services, that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items: [Contracting Officer check as appropriate.]

X (1) 52.222-41, Service Contract Act of 1965, as Amended (MAY 1989) (41 U.S.C. 351, et seq.).

 (2) 52.222-42, Statement of Equivalent Rates for Federal Hires (MAY 1989) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).

 (3) 52.222-43, Fair Labor Standards Act and Service Contract Act--Price Adjustment (Multiple Year and Option Contracts) (MAY 1989) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).

 (4) 52.222-44, Fair Labor Standards Act and Service Contract Act--Price Adjustment (February 2002) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).

 (5) 52.222-47, SCA Minimum Wages and Fringe Benefits Applicable to Successor Contract Pursuant to Predecessor Contractor Collective Bargaining Agreements (CBA) (May 1989) (41 U.S.C. 351, et seq.).

(d) Comptroller General Examination of Record. The Contractor shall comply with the provisions of this paragraph (d) if this contract was awarded using other than sealed bid, is in excess of the simplified acquisition threshold, and does not contain the clause at 52.215-2, Audit and Records--Negotiation.

(1) The Comptroller General of the United States, or an authorized representative of the Comptroller General, shall have access to and right to examine any of the Contractor's directly pertinent records involving transactions related to this contract.

(2) The Contractor shall make available at its offices at all reasonable times the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR Subpart 4.7, Contractor Records Retention, of the other clauses of this contract. If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement. Records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.

(3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of type and regardless of form. This does not require the Contractor to create or maintain any record that the Contractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(e) (1) Notwithstanding the requirements of the clauses in paragraphs (a), (b), (c), and (d) of this clause, the Contractor is not required to flow down any FAR clause, other than those in paragraphs (i) through (vi) of this paragraph in a subcontract for commercial items. Unless otherwise indicated below, the extent of the flow down shall be as required by the clause--

(i) 52.219-8, Utilization of Small Business Concerns (May 2004) (15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds \$500,000 (\$1,000,000 for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(ii) 52.222-26, Equal Opportunity (April 2002) (E.O. 11246).

(iii) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (December 2001) (38 U.S.C. 4212).

(iv) 52.222-36, Affirmative Action for Workers with Disabilities (June 1998) (29 U.S.C. 793).

(v) 52.222-39, Notification of Employee Rights Concerning Payment of Union Dues or Fees (DEC 2004) (E.O. 13201).

(vi) 52.222-41, Service Contract Act of 1965, as Amended (May 1989), flow down required for all subcontracts subject to the Service Contract Act of 1965 (41 U.S.C. 351, et seq.).

(vii) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (April 2003) (46 U.S.C. Appx 1241 and 10 U.S.C. 2631). Flow down required in accordance with paragraph (d) of FAR clause 52.247-64.

(2) While not required, the contractor May include in its subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

(End of clause)

52.217-8 OPTION TO EXTEND SERVICES (NOV 1999)

The Government may require continued performance of any services within the limits and at the rates specified in the contract. These rates may be adjusted only as a result of revisions to prevailing labor rates provided by the Secretary of Labor. The option provision may be exercised more than once, but the total extension of performance hereunder shall not exceed 6 months. The Contracting Officer may exercise the option by written notice to the Contractor within 60 days.

(End of clause)

52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT (MAR 2000)

(a) The Government may extend the term of this contract by written notice to the Contractor within 60 days; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 60 days before the contract expires. The preliminary notice does not commit the Government to an extension.

(b) If the Government exercises this option, the extended contract shall be considered to include this option clause.

(c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed 5 years.

(End of clause)

52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es):

<http://www.arnet.gov/far> or <http://farsite.hill.af.mil>

(End of provision)

52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

<http://www.acq.osd.mil/dp/dfars/dfar.html>

(End of clause)

SERVICE WAGE RATES

BRS Document Viewer

WAGE DETERMINATION NO: 94-2567 REV (26) AREA: WA, TACOMA

WAGE DETERMINATION NO: 94-2567 REV (26) AREA: WA, TACOMA

REGISTER OF WAGE DETERMINATIONS UNDER

U. S. DEPARTMENT OF LABOR

FOR OFFICIAL USE ONLY BY FEDERAL AGENCIES PARTICIPATING IN MDU WITH DOL

WASHINGTON D. C. 20210

William W. Gross
DirectorDivision of
Wage DeterminationsWage Determination No.: 1994-2567
Revision No.: 26
Date Of Last Revision: 09/09/2004

State: Washington

Area: Washington Counties of Lewis, Pierce, Thurston

Fringe Benefits Required Follow the Occupational Listing	
OCCUPATION CODE - TITLE	MINIMUM WAGE RATE
01000 - Administrative Support and Clerical Occupations	
01011 - Accounting Clerk I	11.92
01012 - Accounting Clerk II	13.23
01013 - Accounting Clerk III	15.44
01014 - Accounting Clerk IV	17.28
01030 - Court Reporter	15.54
01050 - Dispatcher, Motor Vehicle	17.77
01060 - Document Preparation Clerk	12.70
01070 - Messenger (Courier)	10.96
01090 - Duplicating Machine Operator	12.70
01110 - Film/Tape Librarian	13.94
01115 - General Clerk I	10.21
01116 - General Clerk II	11.53
01117 - General Clerk III	14.80
01118 - General Clerk IV	16.24
01120 - Housing Referral Assistant	17.89
01131 - Key Entry Operator I	12.57
01132 - Key Entry Operator II	14.56
01191 - Order Clerk I	12.86
01192 - Order Clerk II	14.04
01261 - Personnel Assistant (Employment) I	13.21
01262 - Personnel Assistant (Employment) II	14.66
01263 - Personnel Assistant (Employment) III	16.20
01264 - Personnel Assistant (Employment) IV	18.61
01270 - Production Control Clerk	18.66
01290 - Rental Clerk	12.63
01300 - Scheduler, Maintenance	14.37
01311 - Secretary I	14.37
01312 - Secretary II	15.54
01313 - Secretary III	17.35
01314 - Secretary IV	21.44
01315 - Secretary V	24.91
01320 - Service Order Dispatcher	16.27
01341 - Stenographer I	14.10
01342 - Stenographer II	16.02
01400 - Supply Technician	18.49
01420 - Survey Worker (Interviewer)	13.39
01460 - Switchboard Operator-Receptionist	12.38
01510 - Test Examiner	15.54
01520 - Test Proctor	15.54
01531 - Travel Clerk I	11.23
01532 - Travel Clerk II	12.22
01533 - Travel Clerk III	13.16
01611 - Word Processor I	13.46

01612 - Word Processor II	15.07
01613 - Word Processor III	16.24
03000 - Automatic Data Processing Occupations	
03010 - Computer Data Librarian	15.08
03041 - Computer Operator I	15.08
03042 - Computer Operator II	16.73
03043 - Computer Operator III	18.66
03044 - Computer Operator IV	21.87
03045 - Computer Operator V	24.27
03071 - Computer Programmer I (1)	16.36
03072 - Computer Programmer II (1)	20.71
03073 - Computer Programmer III (1)	27.62
03074 - Computer Programmer IV (1)	27.62
03101 - Computer Systems Analyst I (1)	27.62
03102 - Computer Systems Analyst II (1)	27.62
03103 - Computer Systems Analyst III (1)	27.62
03160 - Peripheral Equipment Operator	15.08
05000 - Automotive Service Occupations	
05005 - Automotive Body Repairer, Fiberglass	19.80
05010 - Automotive Glass Installer	20.46
05040 - Automotive Worker	20.46
05070 - Electrician, Automotive	21.78
05100 - Mobile Equipment Servicer	18.55
05130 - Motor Equipment Metal Mechanic	21.78
05160 - Motor Equipment Metal Worker	20.46
05190 - Motor Vehicle Mechanic	21.69
05220 - Motor Vehicle Mechanic Helper	18.55
05250 - Motor Vehicle Upholstery Worker	20.46
05280 - Motor Vehicle Wrecker	20.46
05310 - Painter, Automotive	21.12
05340 - Radiator Repair Specialist	20.46
05370 - Tire Repairer	14.81
05400 - Transmission Repair Specialist	21.78
07000 - Food Preparation and Service Occupations	
(not set) - Food Service Worker	9.24
07010 - Baker	12.63
07041 - Cook I	11.04
07042 - Cook II	12.14
07070 - Dishwasher	9.55
07130 - Meat Cutter	18.28
07250 - Waiter/Waitress	9.27
09000 - Furniture Maintenance and Repair Occupations	
09010 - Electrostatic Spray Painter	17.45
09040 - Furniture Handler	15.33
09070 - Furniture Refinisher	17.45
09100 - Furniture Refinisher Helper	15.33
09110 - Furniture Repairer, Minor	16.37
09130 - Upholsterer	17.92
11030 - General Services and Support Occupations	
11030 - Cleaner, Vehicles	11.31
11060 - Elevator Operator	10.66
11090 - Gardener	13.31
11121 - House Keeping Aid I	9.34
11122 - House Keeping Aid II	10.66
11150 - Janitor	11.19
11210 - Laborer, Grounds Maintenance	13.16
11240 - Maid or Houseman	9.34
11270 - Pest Controller	16.54
11300 - Refuse Collector	13.61
11330 - Tractor Operator	14.41
11360 - Window Cleaner	11.78
12000 - Health Occupations	
12020 - Dental Assistant	14.32
12040 - Emergency Medical Technician (EMT)/Paramedic/Ambulance Driver	17.57
12071 - Licensed Practical Nurse I	14.97
12072 - Licensed Practical Nurse II	16.78
12073 - Licensed Practical Nurse III	18.77
12100 - Medical Assistant	13.46
12130 - Medical Laboratory Technician	15.77
12160 - Medical Record Clerk	15.77

12190 - Medical Record Technician	16.03
12221 - Nursing Assistant I	9.66
12222 - Nursing Assistant II	10.72
12223 - Nursing Assistant III	11.85
12224 - Nursing Assistant IV	14.10
12250 - Pharmacy Technician	14.43
12280 - Phlebotomist	14.53
12311 - Registered Nurse I	20.46
12312 - Registered Nurse II	25.01
12313 - Registered Nurse II, Specialist	25.01
12314 - Registered Nurse III	30.21
12315 - Registered Nurse III, Anesthetist	30.21
12316 - Registered Nurse IV	36.29
13000 - Information and Arts Occupations	
13002 - Audiovisual Librarian	19.80
13011 - Exhibits Specialist I	16.95
13012 - Exhibits Specialist II	20.94
13013 - Exhibits Specialist III	25.64
13041 - Illustrator I	16.95
13042 - Illustrator II	20.94
13043 - Illustrator III	25.64
13047 - Librarian	22.93
13050 - Library Technician	13.73
13071 - Photographer I	17.23
13072 - Photographer II	19.32
13073 - Photographer III	23.83
13074 - Photographer IV	29.15
13075 - Photographer V	35.39
15000 - Laundry, Dry Cleaning, Pressing and Related Occupations	
15010 - Assembler	8.38
15030 - Counter Attendant	8.38
15040 - Dry Cleaner	10.54
15070 - Finisher, Flatwork, Machine	8.38
15090 - Presser, Hand	8.38
15100 - Presser, Machine, Drycleaning	8.38
15130 - Presser, Machine, Shirts	8.38
15160 - Presser, Machine, Wearing Apparel, Laundry	8.38
15190 - Sewing Machine Operator	11.23
15220 - Tailor	11.91
15250 - Washer, Machine	9.10
19000 - Machine Tool Operation and Repair Occupations	
19010 - Machine-Tool Operator (Toolroom)	21.05
19040 - Tool and Die Maker	24.23
21000 - Material Handling and Packing Occupations	
21010 - Fuel Distribution System Operator	22.09
21020 - Material Coordinator	15.99
21030 - Material Expediter	15.99
21040 - Material Handling Laborer	14.40
21050 - Order Filler	12.87
21071 - Forklift Operator	18.06
21080 - Production Line Worker (Food Processing)	16.32
21100 - Shipping/Receiving Clerk	15.17
21130 - Shipping Packer	15.17
21140 - Store Worker I	12.99
21150 - Stock Clerk (Shelf Stocker; Store Worker II)	16.39
21210 - Tools and Parts Attendant	18.06
21400 - Warehouse Specialist	16.32
23000 - Mechanics and Maintenance and Repair Occupations	
23010 - Aircraft Mechanic	22.24
23040 - Aircraft Mechanic Helper	17.67
23050 - Aircraft Quality Control Inspector	22.94
23060 - Aircraft Servicer	19.96
23070 - Aircraft Worker	20.89
23100 - Appliance Mechanic	19.42
23120 - Bicycle Repairer	14.81
23125 - Cable Splicer	25.05
23130 - Carpenter, Maintenance	21.23
23140 - Carpet Layer	20.46
23160 - Electrician, Maintenance	25.67
23181 - Electronics Technician, Maintenance I	20.74

23182 - Electronics Technician, Maintenance II	23. 58
23183 - Electronics Technician, Maintenance III	25. 30
23260 - Fabric Worker	18. 55
23290 - Fire Alarm System Mechanic	19. 80
23310 - Fire Extinguisher Repairer	18. 43
23340 - Fuel Distribution System Mechanic	21. 78
23370 - General Maintenance Worker	16. 91
23400 - Heating, Refrigeration and Air Conditioning Mechanic	18. 98
23430 - Heavy Equipment Mechanic	22. 62
23440 - Heavy Equipment Operator	24. 07
23460 - Instrument Mechanic	22. 62
23470 - Laborer	11. 17
23500 - Locksmith	19. 24
23530 - Machinery Maintenance Mechanic	21. 61
23550 - Machinist, Maintenance	19. 43
23580 - Maintenance Trades Helper	12. 47
23640 - Millwright	21. 74
23700 - Office Appliance Repairer	21. 16
23740 - Painter, Aircraft	18. 88
23760 - Painter, Maintenance	17. 45
23790 - Pipefitter, Maintenance	24. 16
23800 - Plumber, Maintenance	21. 88
23820 - Pneudraulic Systems Mechanic	21. 90
23850 - Rigger	20. 32
23870 - Scale Mechanic	20. 30
23890 - Sheet-Metal Worker, Maintenance	21. 53
23910 - Small Engine Mechanic	17. 99
23930 - Telecommunication Mechanic I	19. 80
23931 - Telecommunication Mechanic II	22. 45
23950 - Telephone Lineman	19. 80
23960 - Welder, Combination, Maintenance	18. 00
23965 - Well Driller	21. 78
23970 - Woodcraft Worker	21. 90
23980 - Woodworker	16. 91
24000 - Personal Needs Occupations	
24570 - Child Care Attendant	10. 33
24580 - Child Care Center Clerk	13. 41
24600 - Chore Aid	10. 08
24630 - Homemaker	14. 91
25000 - Plant and System Operation Occupations	
25010 - Boiler Tender	20. 49
25040 - Sewage Plant Operator	23. 68
25070 - Stationary Engineer	20. 49
25190 - Ventilation Equipment Tender	15. 89
25210 - Water Treatment Plant Operator	23. 68
27000 - Protective Service Occupations	
(not set) - Police Officer	24. 27
27004 - Alarm Monitor	17. 34
27006 - Corrections Officer	20. 71
27010 - Court Security Officer	23. 51
27040 - Detention Officer	23. 51
27070 - Firefighter	25. 24
27101 - Guard I	9. 35
27102 - Guard II	13. 68
28000 - Stevedoring/Longshoremen Occupations	
28010 - Blocker and Bracer	20. 66
28020 - Hatch Tender	20. 66
28030 - Line Handler	20. 66
28040 - Stevedore I	20. 19
28050 - Stevedore II	21. 57
29000 - Technical Occupations	
21150 - Graphic Artist	21. 29
29010 - Air Traffic Control Specialist, Center (2)	31. 66
29011 - Air Traffic Control Specialist, Station (2)	21. 83
29012 - Air Traffic Control Specialist, Terminal (2)	24. 05
29023 - Archeological Technician I	18. 88
29024 - Archeological Technician II	21. 10
29025 - Archeological Technician III	26. 14
29030 - Cartographic Technician	24. 74
29035 - Computer Based Training (CBT) Specialist/ Instructor	27. 62

29040 - Civil Engineering Technician	23.08
29061 - Drafter I	15.03
29062 - Drafter II	16.87
29063 - Drafter III	19.04
29064 - Drafter IV	23.59
29081 - Engineering Technician I	15.93
29082 - Engineering Technician II	17.87
29083 - Engineering Technician III	20.17
29084 - Engineering Technician IV	24.99
29085 - Engineering Technician V	30.56
29086 - Engineering Technician VI	36.96
29090 - Environmental Technician	20.86
29100 - Flight Simulator/Instructor (Pilot)	30.58
29160 - Instructor	26.63
29210 - Laboratory Technician	18.55
29240 - Mathematical Technician	21.90
29361 - Paralegal/Legal Assistant I	18.10
29362 - Paralegal/Legal Assistant II	20.39
29363 - Paralegal/Legal Assistant III	22.62
29364 - Paralegal/Legal Assistant IV	24.43
29390 - Photooptics Technician	21.52
29480 - Technical Writer	23.90
29491 - Unexploded Ordnance (UXO) Technician I	20.12
29492 - Unexploded Ordnance (UXO) Technician II	24.35
29493 - Unexploded Ordnance (UXO) Technician III	29.18
29494 - Unexploded (UXO) Safety Escort	20.12
29495 - Unexploded (UXO) Sweep Personnel	20.12
29620 - Weather Observer, Senior (3)	20.86
29621 - Weather Observer, Combined Upper Air and Surface Programs (3)	17.84
29622 - Weather Observer, Upper Air (3)	17.84
31000 - Transportation/ Mobile Equipment Operation Occupations	
31030 - Bus Driver	16.85
31260 - Parking and Lot Attendant	8.95
31290 - Shuttle Bus Driver	13.28
31300 - Taxi Driver	10.57
31361 - Truckdriver, Light Truck	12.07
31362 - Truckdriver, Medium Truck	17.80
31363 - Truckdriver, Heavy Truck	18.69
31364 - Truckdriver, Tractor-Trailer	18.69
99000 - Miscellaneous Occupations	
99020 - Animal Caretaker	11.73
99030 - Cashier	10.13
99041 - Carnival Equipment Operator	11.56
99042 - Carnival Equipment Repairer	11.98
99043 - Carnival Worker	8.83
99050 - Desk Clerk	10.80
99095 - Embalmer	22.36
99300 - Lifeguard	10.57
99310 - Mortician	22.36
99350 - Park Attendant (Aide)	13.28
99400 - Photofinishing Worker (Photo Lab Tech., Darkroom Tech)	11.06
99500 - Recreation Specialist	14.11
99510 - Recycling Worker	16.94
99610 - Sales Clerk	12.84
99620 - School Crossing Guard (Crosswalk Attendant)	15.02
99630 - Sport Official	10.57
99658 - Survey Party Chief (Chief of Party)	27.75
99659 - Surveying Technician (Instr. Person/Surveyor Asst./Instr.)	22.18
99660 - Surveying Aide	16.19
99690 - Swimming Pool Operator	12.62
99720 - Vending Machine Attendant	13.20
99730 - Vending Machine Repairer	16.85
99740 - Vending Machine Repairer Helper	14.41

ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: \$2.59 an hour or \$103.60 a week or \$448.93 a month

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor; 3 weeks after 5 years, and 4 weeks after 15 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever

employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (Reg. 29 CFR 4.173)

HOLIDAYS: A minimum of ten paid holidays per year: New Year's Day, Martin Luther King Jr.'s Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. (A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4.174)

THE OCCUPATIONS WHICH HAVE PARENTHESES AFTER THEM RECEIVE THE FOLLOWING BENEFITS (as numbered):

1) Does not apply to employees employed in a bona fide executive, administrative, or professional capacity as defined and delineated in 29 CFR 541. (See CFR 4.156)

2) **APPLICABLE TO AIR TRAFFIC CONTROLLERS ONLY - NIGHT DIFFERENTIAL:** An employee is entitled to pay for all work performed between the hours of 6:00 P.M. and 6:00 A.M. at the rate of basic pay plus a night pay differential amounting to 10 percent of the rate of basic pay.

3) **WEATHER OBSERVERS - NIGHT PAY & SUNDAY PAY:** If you work at night as part of a regular tour of duty, you will earn a night differential and receive an additional 10% of basic pay for any hours worked between 6pm and 6am. If you are a full-time employee (40 hours a week) and Sunday is part of your regularly scheduled workweek, you are paid at your rate of basic pay plus a Sunday premium of 25% of your basic rate for each hour of Sunday work which is not overtime (i.e. occasional work on Sunday outside the normal tour of duty is considered overtime work).

HAZARDOUS PAY DIFFERENTIAL: An 8 percent differential is applicable to employees employed in a position that represents a high degree of hazard when working with or in close proximity to ordnance, explosives, and incendiary materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordnance, explosives, and pyrotechnic compositions such as lead azide, black powder and photoflash powder. All dry-house activities involving propellants or explosives. Demilitarization, modification, renovation, demolition, and maintenance operations on sensitive ordnance, explosives and incendiary materials. All operations involving regrading and cleaning of artillery ranges.

A 4 percent differential is applicable to employees employed in a position that represents a low degree of hazard when working with, or in close proximity to ordnance, (or employees possibly adjacent to) explosives and incendiary materials which involves potential injury such as laceration of hands, face, or arms of the employee engaged in the operation, irritation of the skin, minor burns and the like; minimal damage to immediate or adjacent work area or equipment being used. All operations involving unloading, storage, and hauling of ordnance, explosive, and incendiary ordnance material other than small arms ammunition. These differentials are only applicable to work that has been specifically designated by the agency for ordnance, explosives, and incendiary material differential pay.

**** UNIFORM ALLOWANCE ****

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a bona fide collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of \$3.35 per week (or \$.67 cents per day). However, in those instances where the uniforms furnished are made of "wash and wear" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by

the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

**** NOTES APPLYING TO THIS WAGE DETERMINATION ****

Under the policy and guidance contained in All Agency Memorandum No. 159, the Wage and Hour Division does not recognize, for section 4(c) purposes, prospective wage rates and fringe benefit provisions that are effective only upon such contingencies as "approval of Wage and Hour, issuance of a wage determination, incorporation of the wage determination in the contract, adjusting the contract price, etc." (The relevant CBA section) in the collective bargaining agreement between (the parties) contains contingency language that Wage and Hour does not recognize as reflecting "arm's length negotiation" under section 4(c) of the Act and 29 C.F.R. 5.11(a) of the regulations. This wage determination therefore reflects the actual CBA wage rates and fringe benefits paid under the predecessor contract.

Source of Occupational Title and Descriptions:

The duties of employees under job titles listed are those described in the "Service Contract Act Directory of Occupations," Fourth Edition, January 1993, as amended by the Third Supplement, dated March 1997, unless otherwise indicated. This publication may be obtained from the Superintendent of Documents, at 202-783-3238, or by writing to the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Copies of specific job descriptions may also be obtained from the appropriate contracting officer.

REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE {Standard Form 1444 (SF 1444)}

Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed classes of employees shall be paid the monetary wages and furnished the fringe benefits as are determined. Such conforming process shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees. The conformed classification, wage rate, and/or fringe benefits shall be retroactive to the commencement date of the contract. {See Section 4.6 (C)(vi)}

When multiple wage determinations are included in a contract, a separate SF 1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

- 1) When preparing the bid, the contractor identifies the need for a conformed occupation) and computes a proposed rate).
 - 2) After contract award, the contractor prepares a written report listing in order proposed classification title), a Federal grade equivalency (FGE) for each proposed classification), job description), and rationale for proposed wage rate), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.
 - 3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, for review. (See section 4.6(b)(2) of Regulations 29 CFR Part 4).
 - 4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.
 - 5) The contracting officer transmits the Wage and Hour decision to the contractor.
 - 6) The contractor informs the affected employees.
- Information required by the Regulations must be submitted on SF 1444 or bond paper.

When preparing a conformance request, the "Service Contract Act Directory of Occupations" (the Directory) should be used to compare job definitions to insure that duties requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination.

Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination.

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